1. Introduction

1.1 Purpose

This document was created by the development team (Ashish Ghaskata, Krishna Raj Bhandari, Suraj Bhatta, Mohammad Adnan Khan) to formalize the acceptance of the *FunFlips Educational Game* for delivery.

It is intended for stakeholders, testers, product owners, and reviewers involved in the development, validation, and approval process.

The document is binding for the development team, testing personnel, and project stakeholders for ensuring the product meets its intended requirements.

1.2 Summary

This documentation outlines the scope, architecture, validation, and acceptance testing of the *FunFlips* application. It includes details on functional and non-functional requirements verification, execution of test cases, and agreed use case demonstration. **Stakeholders** include the development team, project supervisor, quality assurance personnel, and product owner.

1.3 Definitions and Abbreviations

Term	Definition
SUT	System Under Test
BZA	Provision for Acceptance
UI	User Interface
JSON	JavaScript Object Notation
TSCN	Godot Scene File
GD	Godot Script (GDScript)

1.4 References, Standards, and Rules

- Requirements Specification Document for FunFlips Game
- Test Protocol Documentation
- Usability Standards for Educational Games
- Desktop Platform Testing Guidelines
- Godot Engine Documentation

1.5 Overview

This document is structured into sections describing the system, test strategy, acceptance process, and detailed evaluation of agreed use cases. The appendix includes any supplementary material or visual aids, followed by an index.

2. System Under Test (SUT)

2.1 System

The *FunFlips Educational Game* is a memory-based card matching game for Android and iOS, designed for children aged 4–6 to promote vocabulary and memory skills.

2.2 Purpose

To aid early childhood education through playful interaction, the system offers vocabulary reinforcement via positive feedback, adaptive gameplay, and engaging audio-visuals.

2.3 Scope of SUT

Functional Areas:

- Start screen with "Play" and "Quit"
- Category selection: Animals, Fruits, Vegetables
- Level selection: Easy, Medium, Hard
- Card flipping, matching logic, and feedback
- Menu navigation and replay
- Audio control (mute/unmute)

Non-Functional Areas:

- Performance: ≤ 0.5 seconds response time
- Usability: Child-friendly UI with colourful visuals
- Accessibility: Voice feedback, large tap areas, high contrast
- Offline operability: No internet required

2.4 Technology / Architecture

- Developed using **Godot Engine 4.x**
- Layered architecture: UI → SceneLoader → Game Logic → Data → Services
- Data driven using categories.json
- Reusable components: Card.tscn, AudioControl.gd, SceneLoader.gd

2.5 Verification Focus

Verification covers both functional and non-functional requirements in real-world conditions using:

- Test protocols
- Platform-specific builds (Desktop)
- User interaction validation

3. BZA – Provision for Acceptance

3.1 Purpose
To outline the formal acceptance strategy based on systematic verification of documented requirements and real-use validation.

3.2 Verification Against Requirements Specification
- All gameplay functions, UI navigation, and logic confirmed against specification
- Measured response times met performance criteria
- Usability and accessibility evaluated per design goals
- Executed positive and negative test cases

3.3 Validation Against Application Context
- Validated on Desktop with offline operation
- Verified appropriateness for children aged 4–6
- Evaluated full user journey through real use simulation

3.4 Execution of Acceptance Tests
- System-level tests included:

  - ➢ Launch and quit flow
  - ➢ Full category and level navigation
  - ➢ Gameplay loop (flip, match, feedback)
  - ➢ Post-game options: replay or return to menu
- All agreed use cases successfully tested

3.5 Defect Classification
- No Class 1–3 defects (critical or major)
- Minor Class 4–5 issues (cosmetic) accepted for delivery

3.6 Conclusion
The *FunFlips Educational Game* has passed all acceptance criteria and is approved for final delivery.

4. Submission of Acceptance Report incl. Agreed Use Cases

4.1 Purpose
This section documents that the system meets all functional and non-functional requirements and is fit for the intended audience.

4.2 Verification Against Requirements Specification
- Verified via structured testing
- All scenarios tested and documented
- No blocking defects found

4.3 Validation Against Application Context
- Real-world conditions confirmed functionality
- Gameplay appropriate for intended age group
- Interface responsive and accessible

4.4 Agreed Use Cases Demonstrated

Use Case	Description
Start Screen Navigation	App launches, user can start or quit game
Category Selection	Choose from Animals, Fruits, or Vegetables
Level Selection	Select Easy, Medium, or Hard
Card Matching Gameplay	Flip and match cards with feedback
Level Replay/Menu Return	Options after level: replay, next level, or main menu

4.5 Declaration
All acceptance criteria and agreed use cases have been fulfilled. The system is ready for formal handover to stakeholders.

5. Appendix
- (Insert test logs, screenshots of test sessions, or defect sheets here as needed)

Table of Contents